

David J Hatton  
Director — Federal Regulatory Accounting

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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

**NYNEX**

November 18, 1993

**EX PARTE**

William F. Caton  
Acting Secretary  
Federal Communications Commission  
1919 M Street, N.W., - Room 222  
Washington, DC 20554

RE: CC Docket No. 88-57 DA 93-1343 RM No. 8380,  
CC Docket No. 92-260

Dear Mr. Caton:

Today, Mr. A. Trinchese, Ms. D. Haraldson and I, representing the NYNEX Telephone Companies, met with Mr. William Kehoe, Attorney, Accounting and Audits Division of the Common Carrier Bureau, to discuss issues in the above referenced proceedings.

A copy of materials used in the presentation is attached.

Please address any questions in this matter to my attention.

Sincerely,



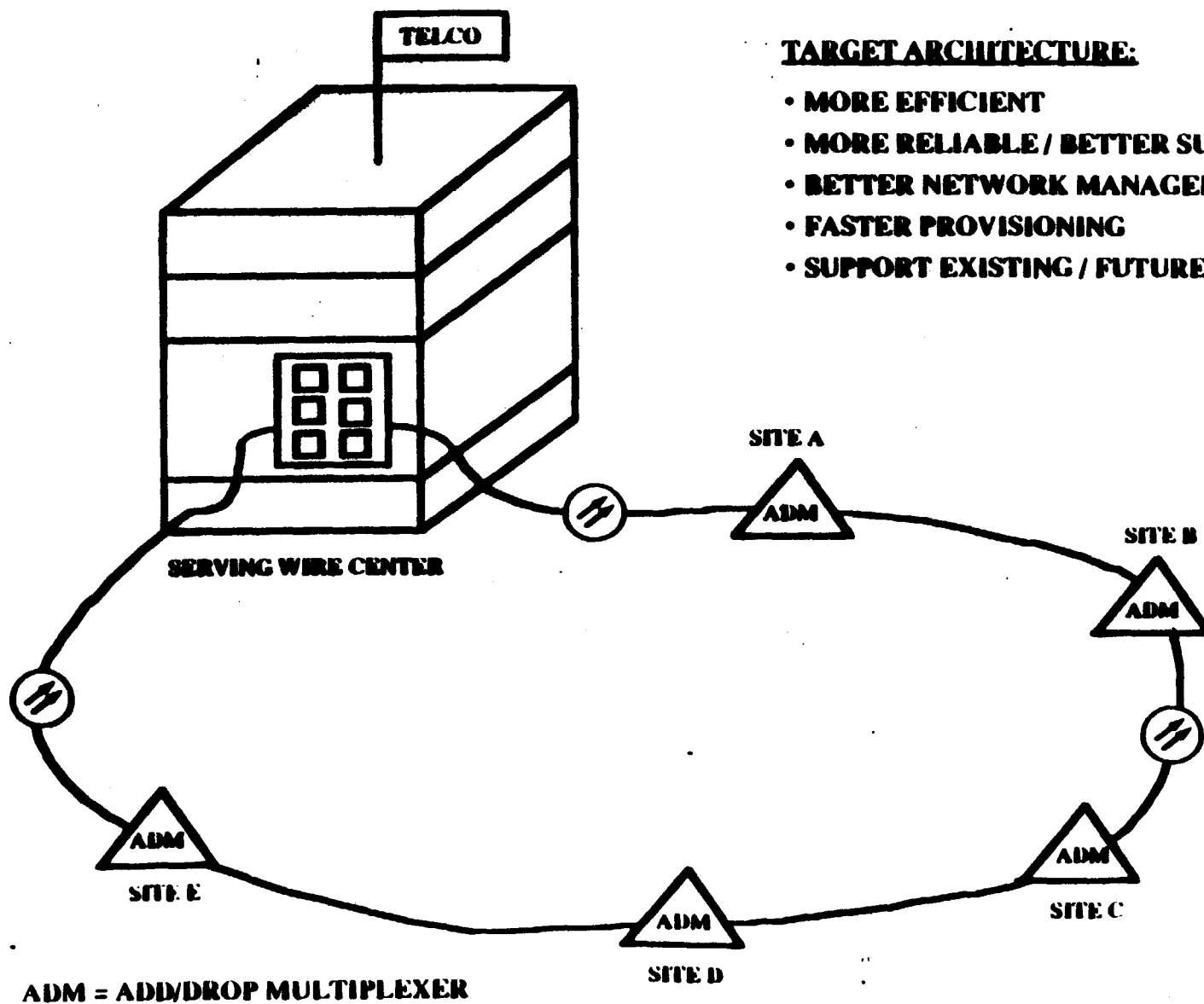
Attachment

cc: W. Kehoe



NYNEX Recycles

## CURRENT VIEW OF NETWORK TECHNOLOGY EVOLUTION



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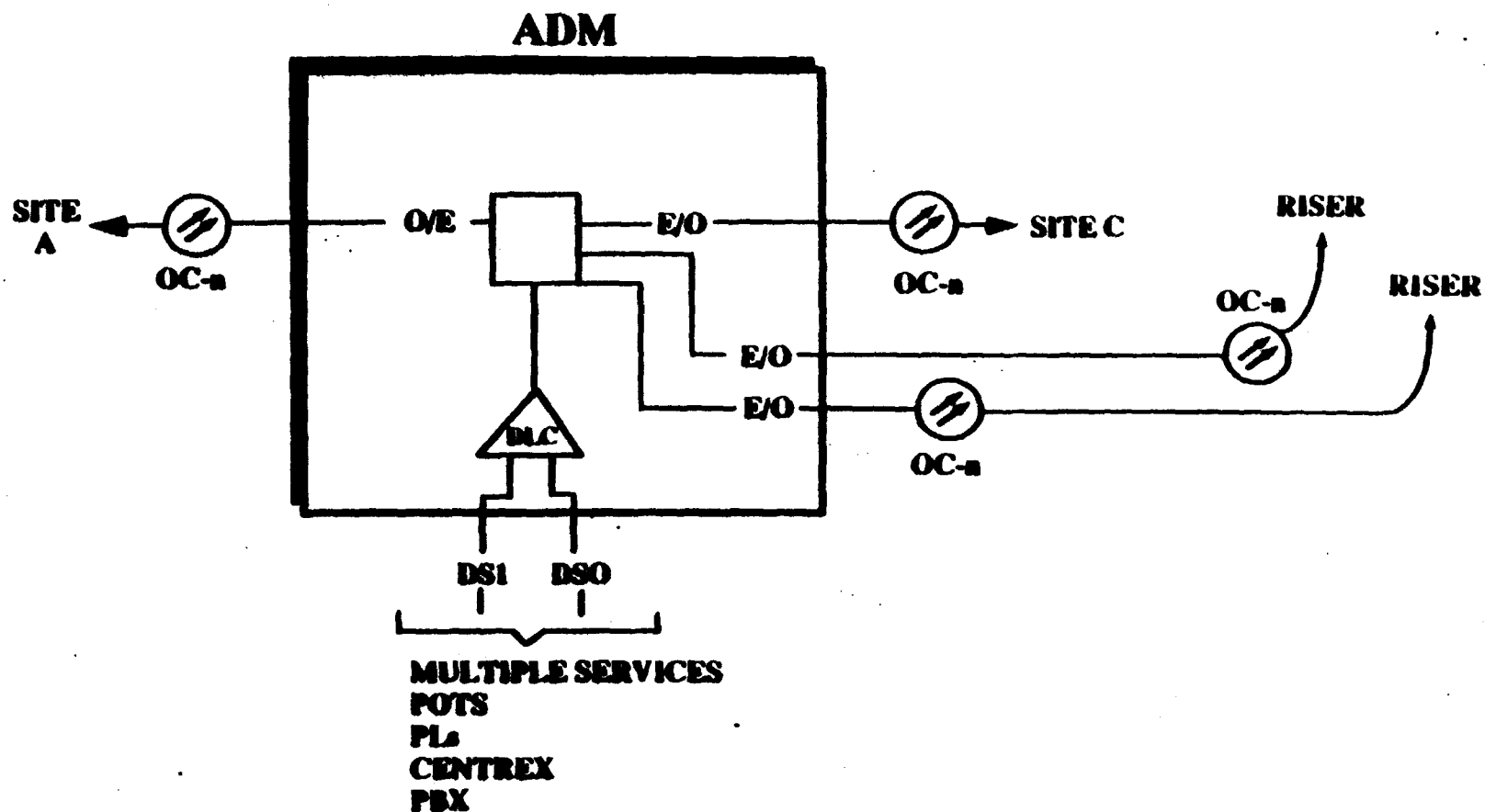
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## CURRENT VIEW OF NETWORK TECHNOLOGY EVOLUTION

### A CLOSER LOOK AT THE ADM



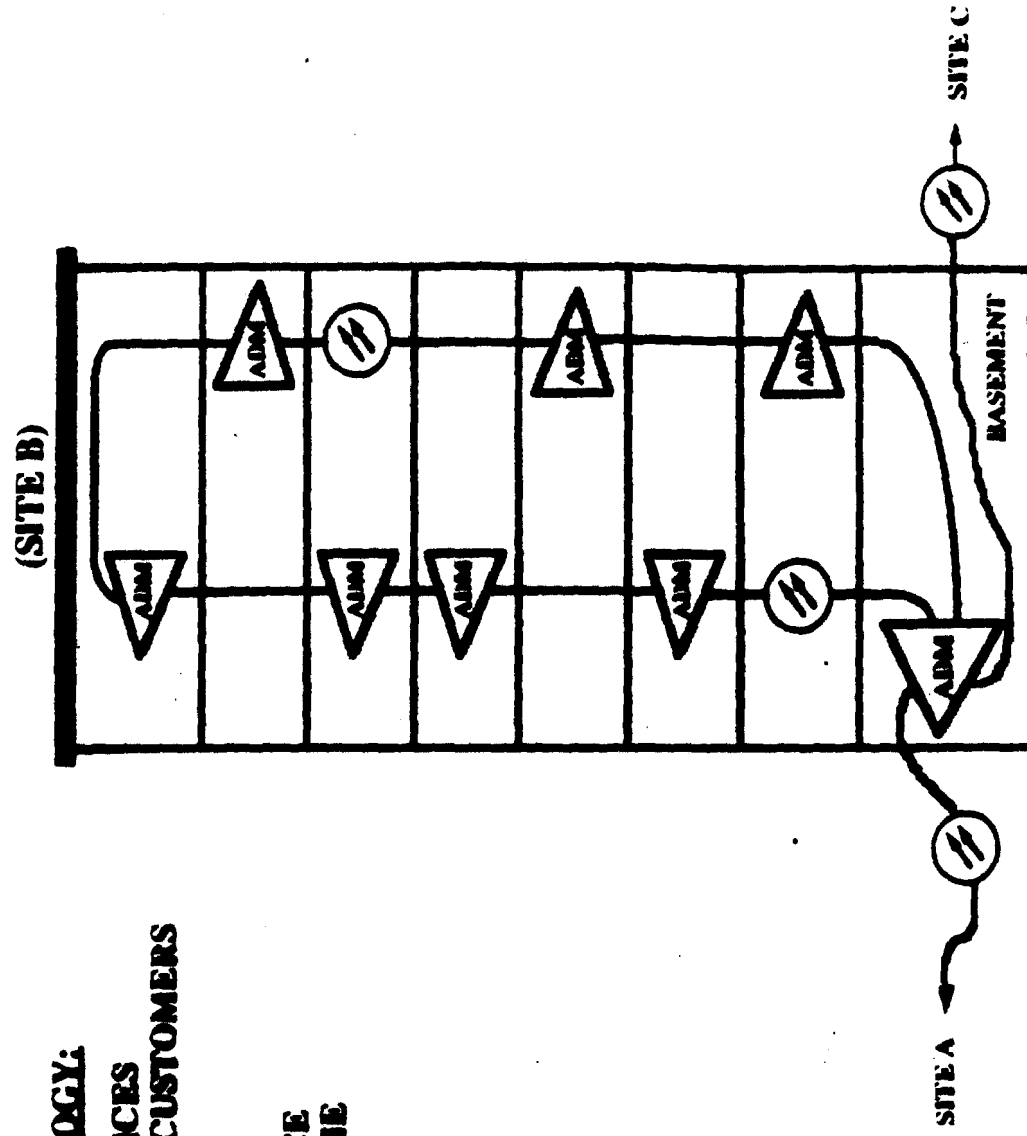
(NOTE: SIMPLIFIED FOR DISCUSSION PURPOSES)

DLC = DIGITAL LOOP CARRIER  
OC = OPTICAL CARRIER

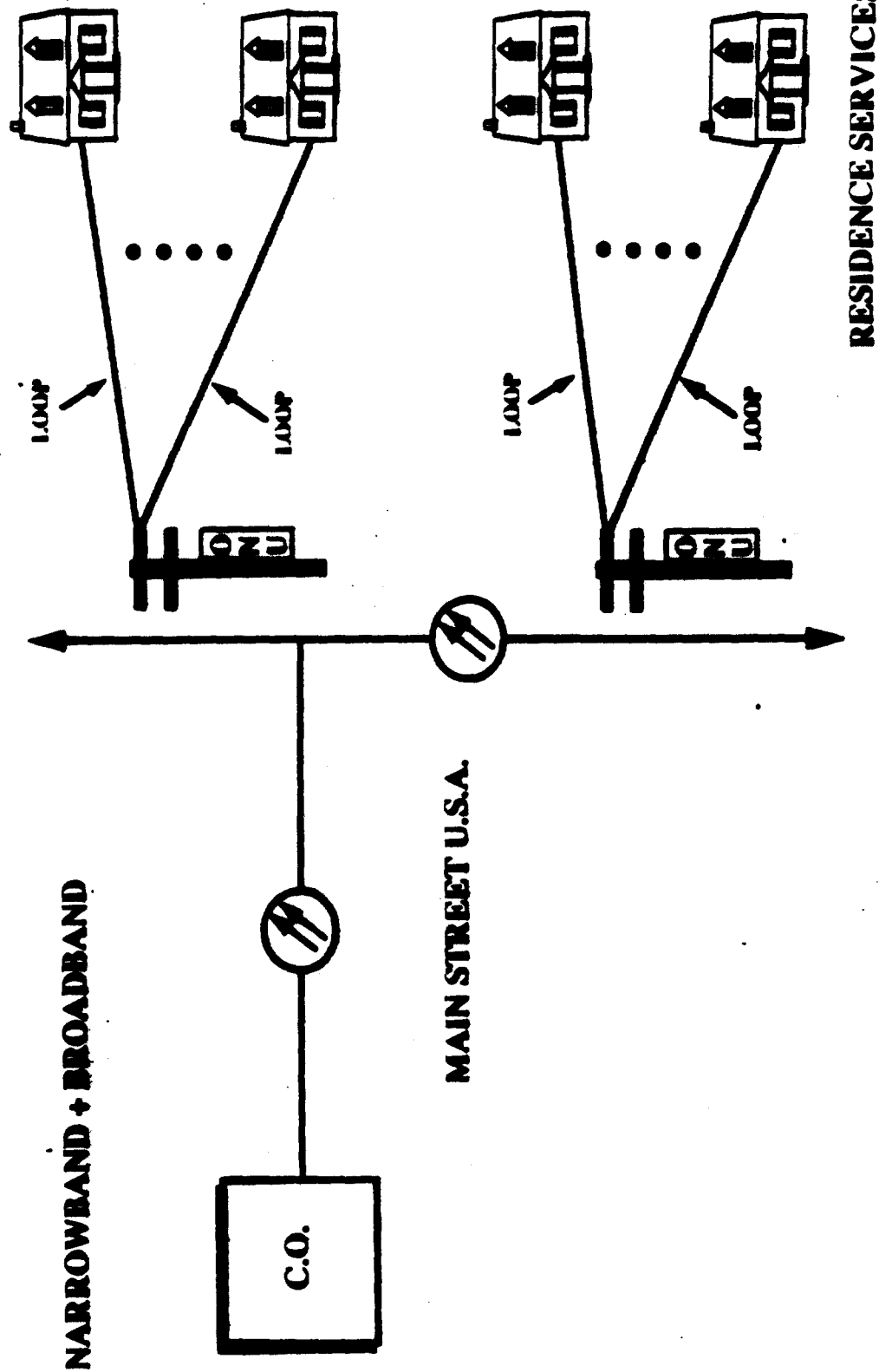
## CURRENT VIEW OF NETWORK TECHNOLOGY EVOLUTION

### EXTENDING THE TECHNOLOGY:

- DELIVER MULTIPLE SERVICES TO SINGLE OR MULTIPLE CUSTOMERS
- BENEFITS:
  - FASTER PROVISIONING
  - MORE RELIABLE SERVICE
  - EXTENDING FIBER TO THE CUSTOMER



## CURRENT VIEW OF NETWORK TECHNOLOGY



# LOCAL LOOP EVOLUTION

## TRANSMISSION MEDIUM OPTIONS



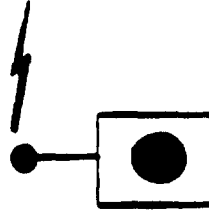
**Twisted Pair  
Copper**



**Fiber**



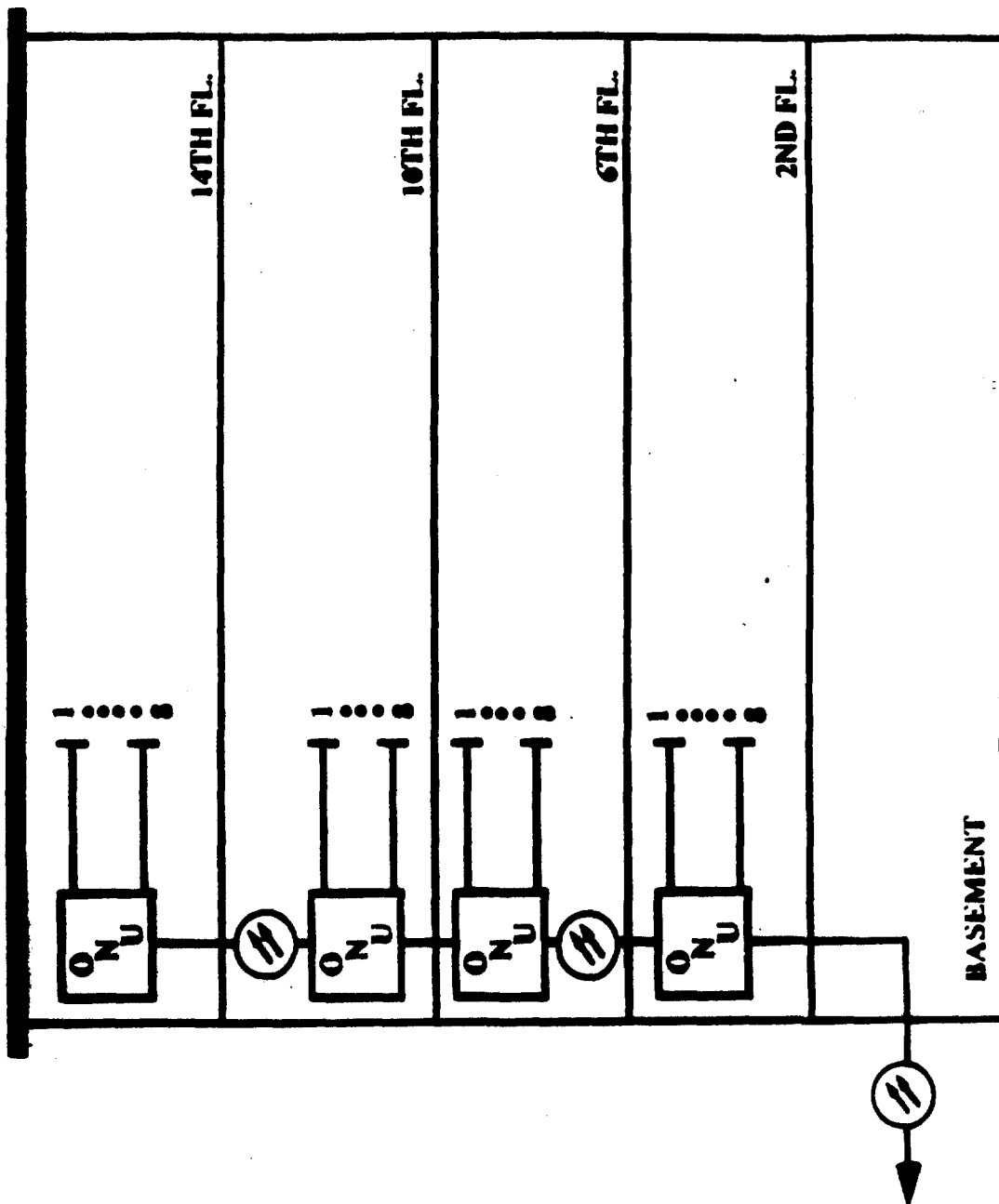
**Coaxial Cable**



**Wireless**

## CURRENT VIEW OF NETWORK TECHNOLOGY

### MULTI-STORY / MULTI-UNIT RESIDENTIAL BUILDING



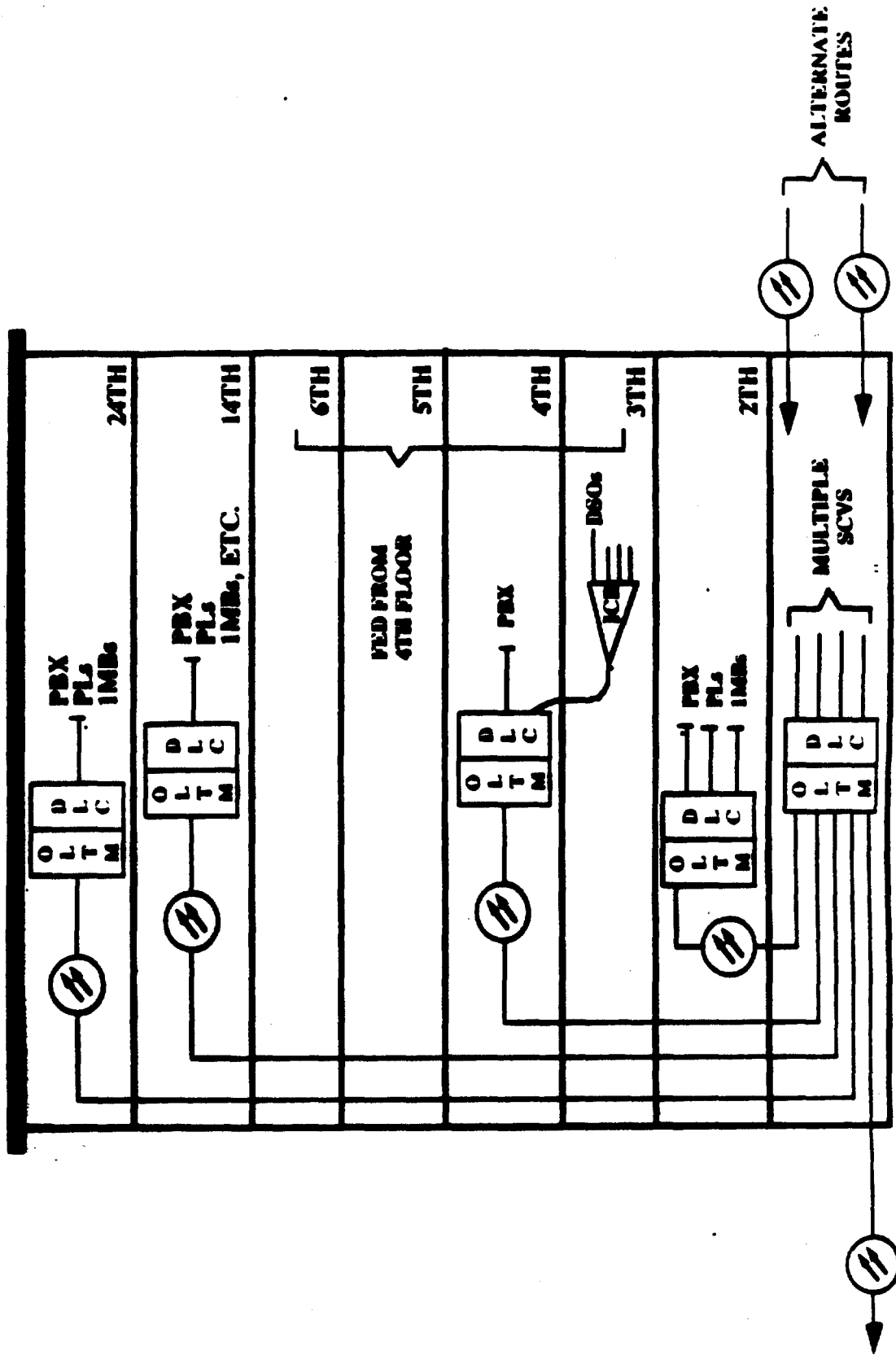
## ***ADVANTAGES OF TAKING FIBER TO THE CUSTOMER***

- **HIGH CAPACITY**
- **VERY SECURE**
- **NONCORROSIVE**
- **RELATIVELY LOW COST**
- **MINIMAL POWER REQUIREMENTS**
- **INSENSITIVE TO ELECTROMAGNETIC INTERFERENCE**

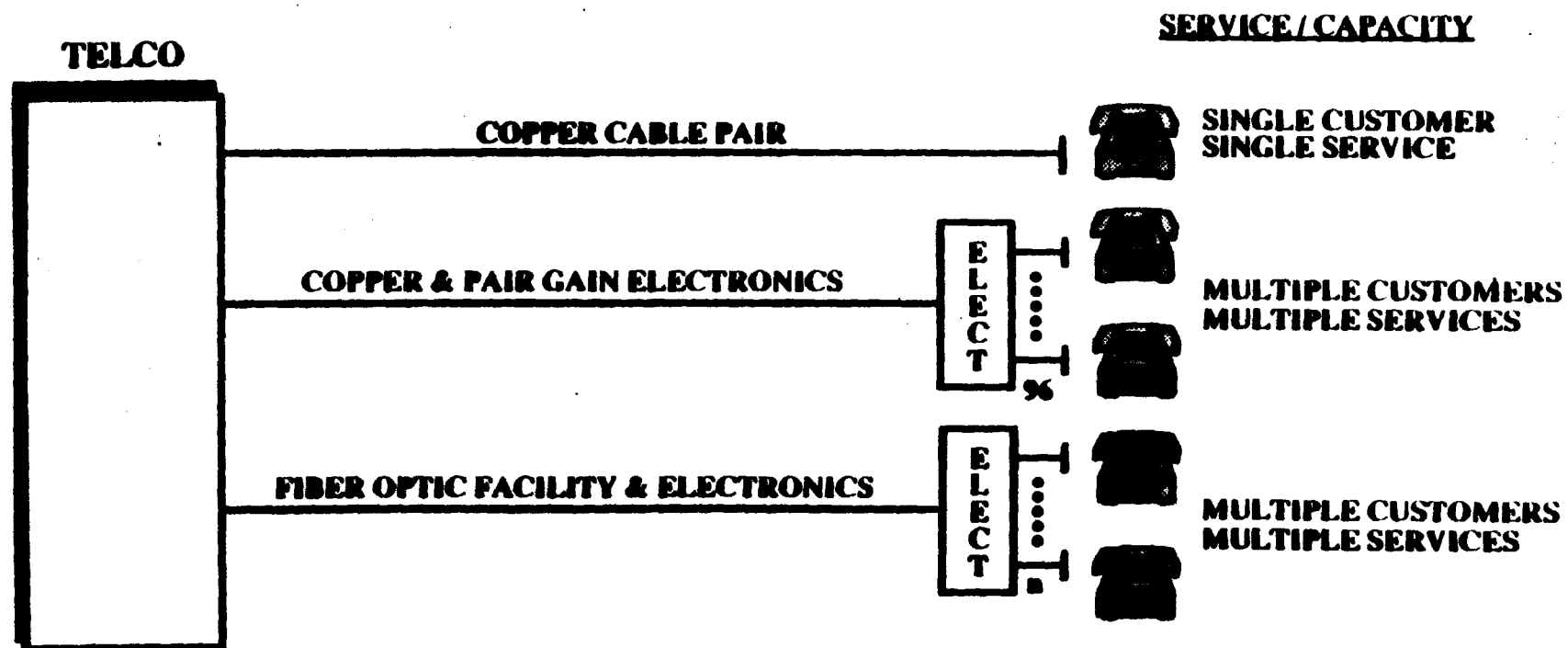


# NETWORK TECHNOLOGY - WHERE WE ARE TODAY

7TH AVENUE - MID MANHATTAN

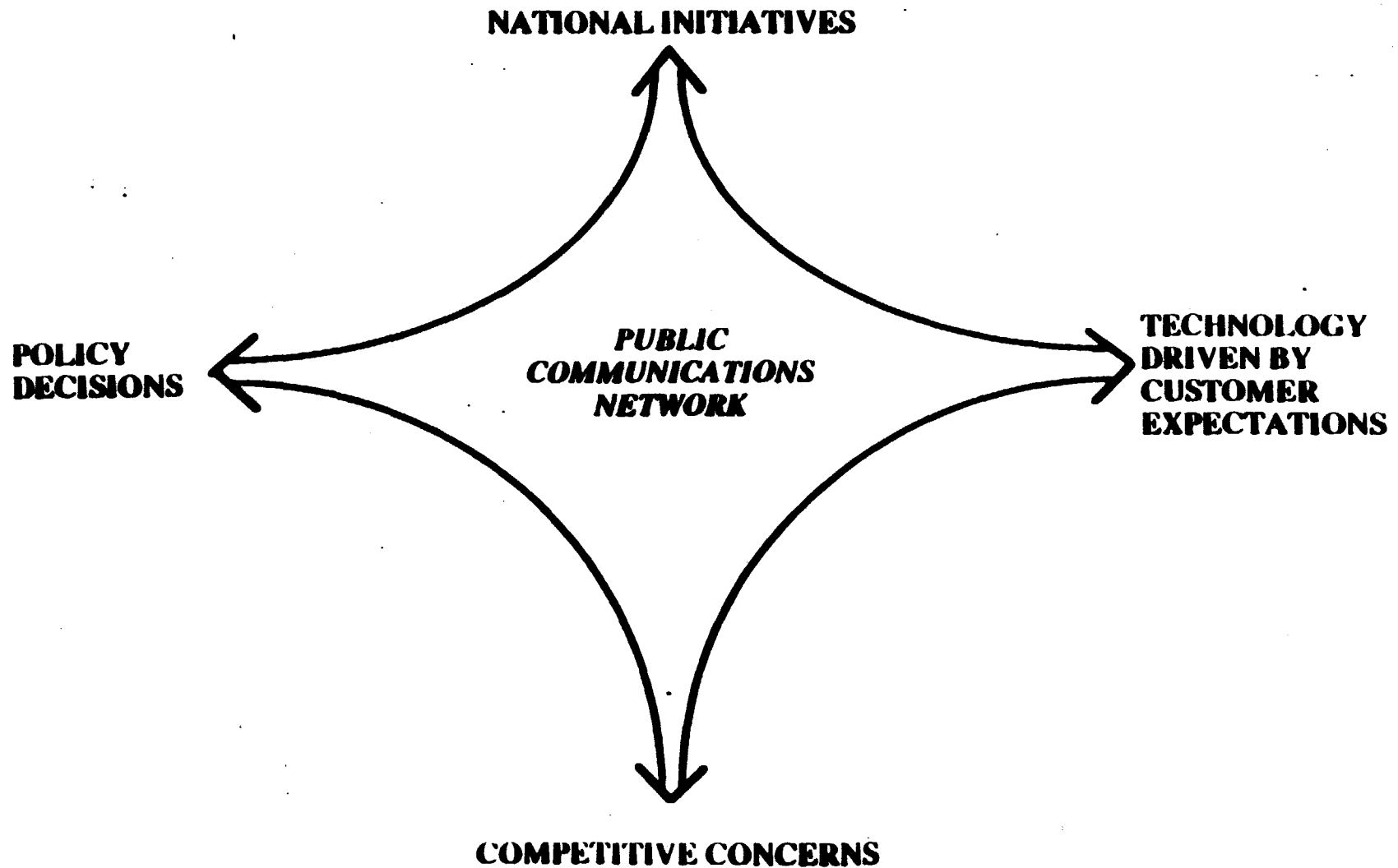


## THE EVOLUTION OF TRANSMISSION MEDIUM



■ = FIBER CAPACITY A RESULT OF CURRENT ELECTRONIC CAPABILITIES

## **FORCES IMPACTING THE PUBLIC NETWORK**



## **FORCES IMPACTING THE PUBLIC NETWORK**

- **NATIONAL INITIATIVES**
  - **NATIONAL INFORMATION INFRASTRUCTURE - "THE INFORMATION AGE"**
- **TECHNOLOGY / CUSTOMER EXPECTATIONS**
  - **RELIABLE**
  - **ACCESSIBLE & SECURE**
  - **BANDWIDTH RICH**
  - **INTELLIGENT**
  - **INTERACTIVE**
  - **UBIQUITOUS**
  - **AFFORDABLE**

## ***FORCES IMPACTING THE PUBLIC NETWORK***

- **COMPETTIVE CONCERNS**
  - **INCONSISTENT DEMARCATION POINTS**
    - . **CABLE**
    - . **VDT ??**
    - . **TELEPHONY**
      - **LECs**
      - **CAPs**

## ***POLICY DECISIONS***

- **PAST POLICY DECISIONS**
  - **MULTIPLEXER EXCEPTION**
  - **WAIVER OF NETWORK LOOPBACK TESTING**
- **IXC PROVISIONING / MFJ ISSUES**
- **MO&O ON EDS FIBER PETITION**

## ***ISSUES TO BE CONSIDERED***

- **WHO IS THE CUSTOMER?**
  - **THE BUILDING OWNER**
  - **THE CABLE / WIRE PROVIDER**
  - **THE INDIVIDUAL TENANT**
  - **ALL OF THE ABOVE**
- **WHAT IS THE SERVICE?**
  - **SERVICE DELIVERED BY THE REGULATED TELCO  
WILL DIFFER DEPENDING ON CUSTOMER / SERVICE**
- **WHO IS RESPONSIBLE FOR:**
  - **TESTING THE SERVICE?**
  - **TESTING TO WHAT POINT?**
  - **RESTORATION OF SERVICE? (TIMING, CHARGES,  
DISPUTES)**
- **STATE REGULATORY CONCERNS**
- **UNIVERSAL SERVICE PROVIDER RESPONSIBILITY**

**ISSUES TO BE CONSIDERED  
(CONTINUED)**

**SECURITY / RELIABILITY**

- **IMPACT OF COMPETING "CUSTOMERS" HAVING ACCESS**
- **POTENTIAL PROBLEMS RESULTING FROM:**
  - **CUSTOMER ERROR**
  - **ATTEMPTING REPAIR**
  - **DELIBERATE TAMPERING**
- **WHO CONTROLS ACCESS TO LOCATION?**
  - **MULTIPLE PARTY ACCESS AS OPPOSED TO LIMITED NUMBER OF SERVICE PROVIDERS**
- **ADVANCED TECHNOLOGIES REQUIRE CONSIDERATION OF SECURITY / RELIABILITY**



## **NETWORK RELIABILITY**

- **ELECTRONICS ARE NECESSARY IN NETWORK OF TODAY AND TOMORROW**
- **SECURITY OF ELECTRONICS IS ESSENTIAL FOR RELIABLE SERVICE**
- **CONFINING ELECTRONICS TO THE BASEMENT IS NOT IN THE PUBLIC INTEREST**

### **- DECEMBER 1992 STORMS - WATER IN THE BASEMENT**

#### **BASEMENT EQUIPMENT DAMAGED:**

- **127 JOHN STREET**
- **185 BROAD STREET**
- **77 WATER STREET**
- **88 PINE STREET**
- **120 WALL STREET**
- **90 WEST STREET**

#### **SERVICE MAINTAINED DISTRIBUTED EQUIPMENT**

- **127 JOHN STREET, 15TH FLOOR**
- **185 BROAD STREET, FLOORS 2, 7 & 8**
- **77 WATER STREET, 13TH FLOOR**

- **AT MINIMUM FOCUS SHOULD BE ON CENTRAL POINTS OF DISTRIBUTION**

**FURTHER ACTION DOES NOT APPEAR NECESSARY**

- **EXISTING RULES PROVIDE FOR BUILDING OWNERS /  
OTHER PROVIDERS TO COMPETE**
  - **STS**
  - **CAPs**
  - **CABLE**
  - **CUSTOMERS**

## ***ACTION FOR CONSIDERATION***

- **HOUSE AND RISERS USED TO TERMINATE PAIR GAIN SYSTEMS WOULD BE EXCLUDED**
- **FIBER OPTIC FACILITIES WOULD BE EXCLUDED**
- **PROVISIONING OF SERVICES TO IXC's WOULD BE EXCLUDED**
- **CONSISTENT DEMARCATION POINTS ESTABLISHED**
- **PREEMPT STATE REGULATION**

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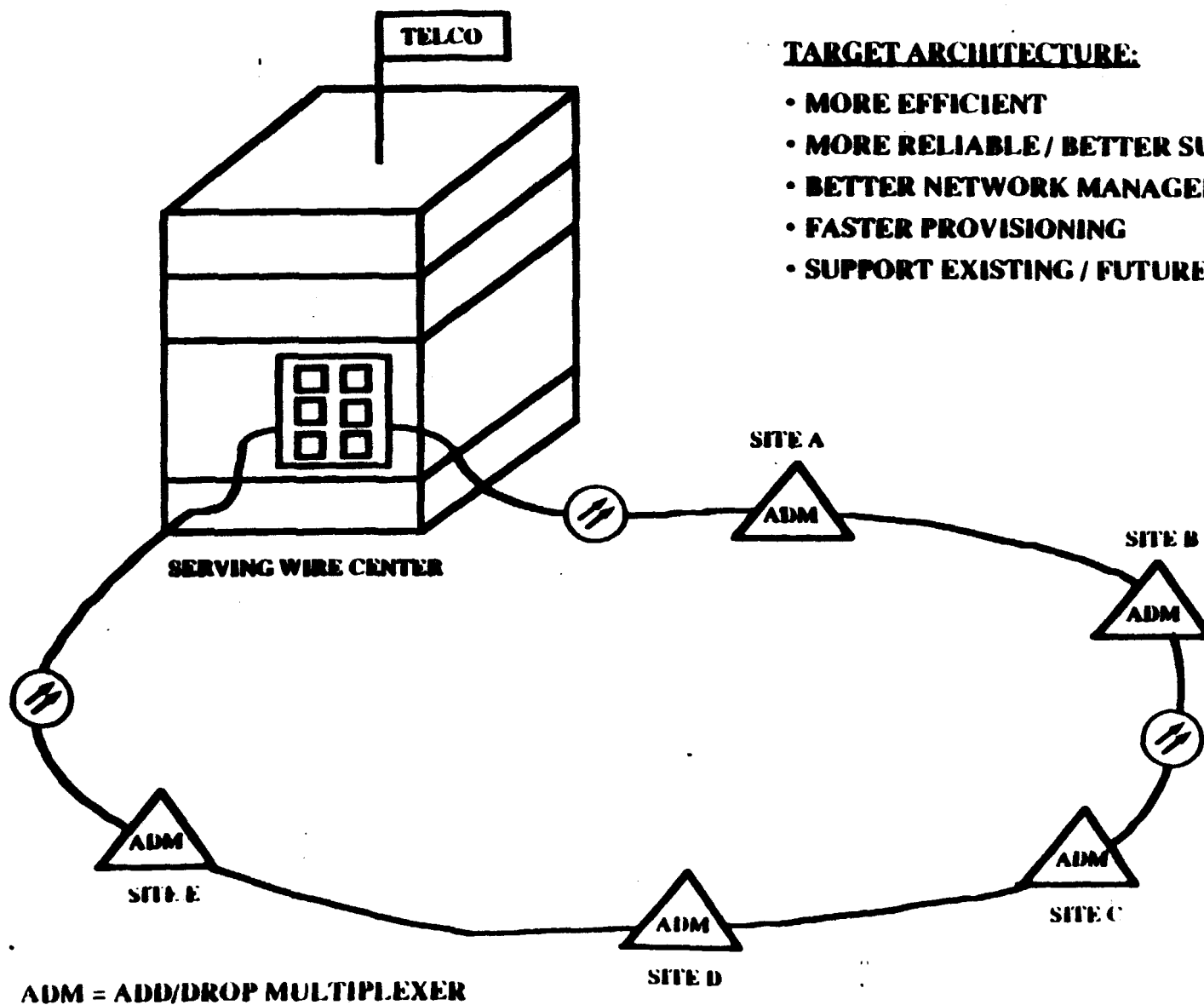


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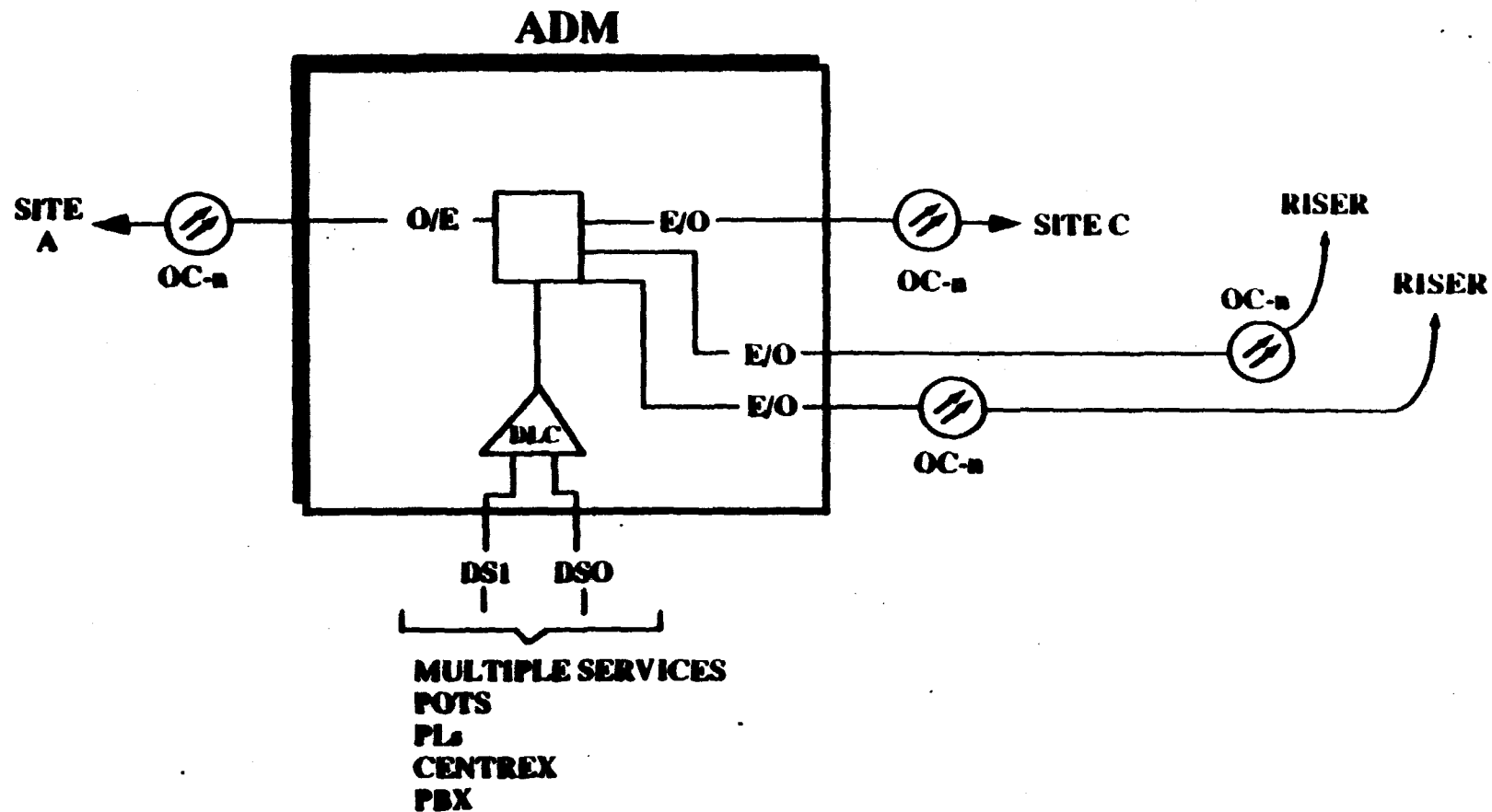


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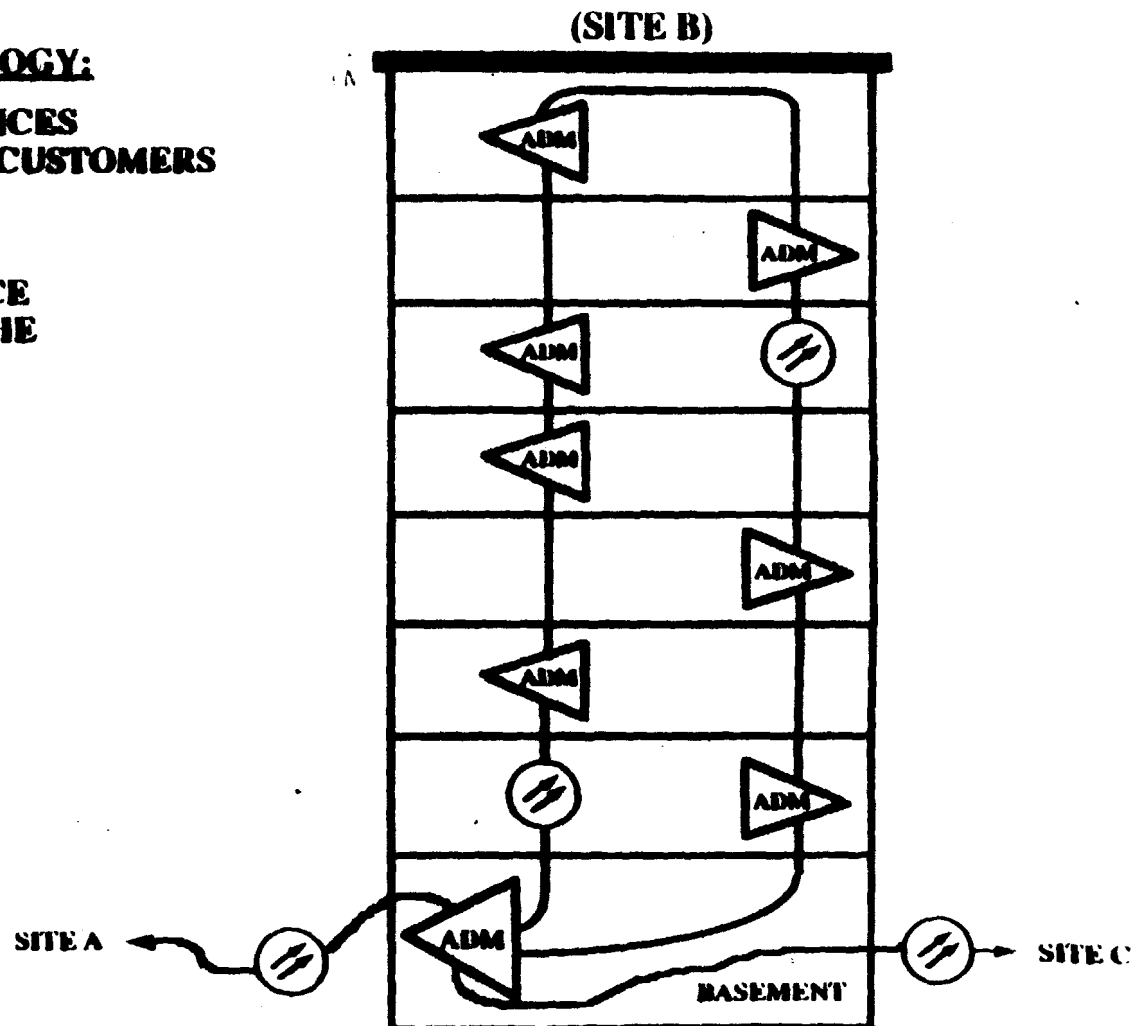
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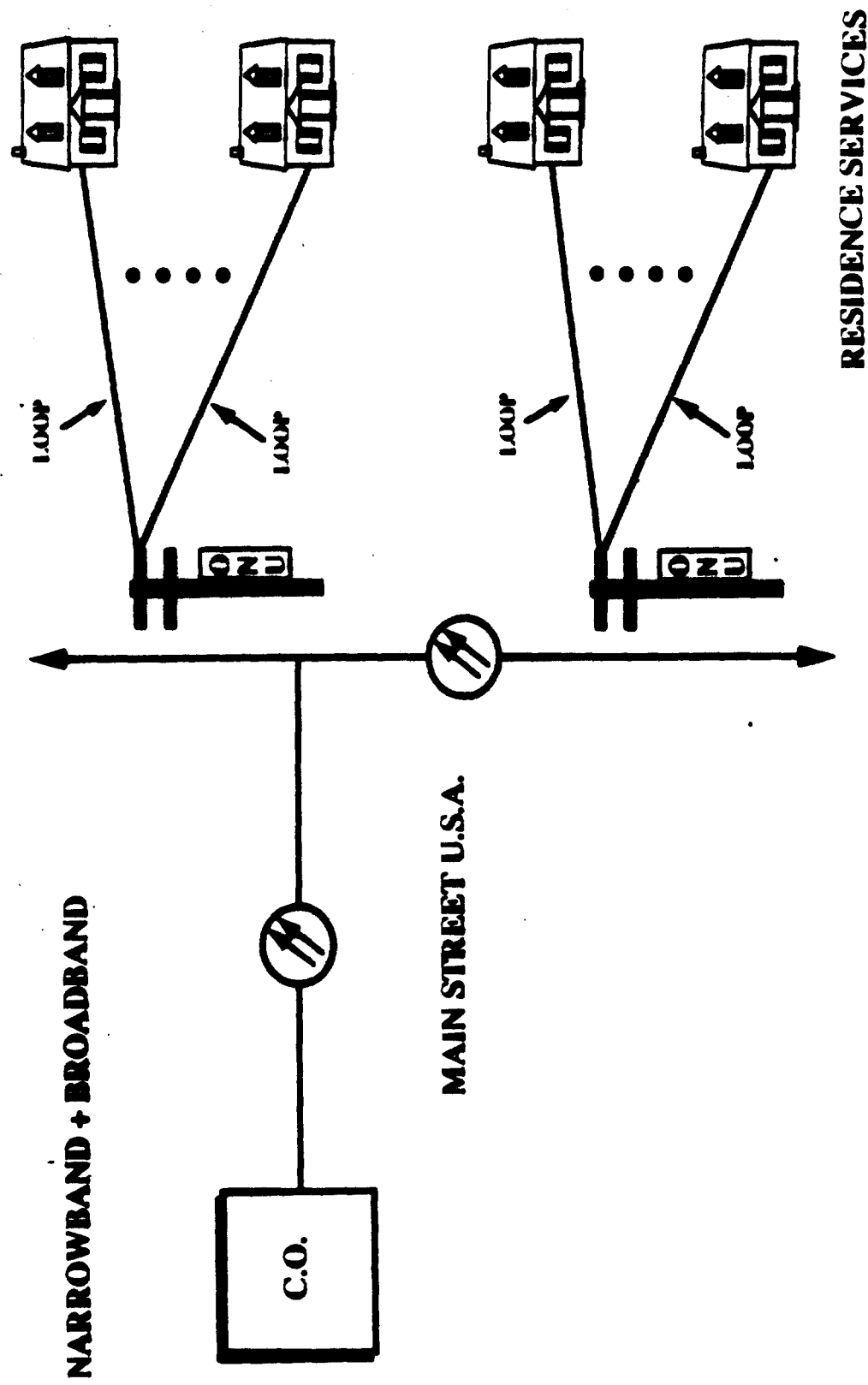
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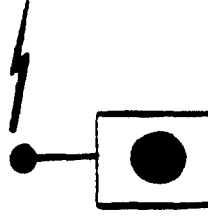
**Twisted Pair  
Copper**



**Fiber**



**Coaxial Cable**



**Wireless**